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07278

PATENT TRADEMARK OFFICE

Docket No.: 2598/OK192

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Seung Won SEO ET AL.

Filed: CONCURRENTLY

For: DIGITAL DYNAMIC CONVERGENCE CONTROL SYSTEM IN A DISPLAY  
SYSTEM

PRELIMINARY AMENDMENT

Commissioner of Patents and Trademarks  
Washington DC 20231

Sir:

Prior to examining the above-identified patent application, please  
enter the following amendment(s):

Please rewrite the section entitled "BRIEF DESCRIPTION OF THE  
INVENTION" to read as follows:

## BRIEF DESCRIPTION OF THE INVENTION

A more complete appreciation of this invention, and many of the attendant advantages thereof, will be readily apparent as the same becomes better understood by reference to the following detailed description when considered in conjunction with the accompanying drawings in which like reference symbols indicate the same or similar components, wherein:

FIG 1 is a schematic diagram showing a conventional convergence correction data generator;

FIG 2 is a diagram of the convergence correction data generator of FIG 1;

FIG 3 is a reference screen pattern adapted for use in the convergence correction data generator of FIG 2;

FIGS 4 through 9 are diagrams showing two pole magnetic fields, four pole magnetic fields, and six pole magnetic fields operated in eight coil structure adapted for use in a dynamic convergence correcting apparatus;

FIG 10 is a schematic diagram showing a system adapted for use in a digital dynamic convergence control method;

FIG 11 is a reference screen pattern adapted for use in the digital dynamic convergence control method;

FIG 12 is a block diagram showing a digital dynamic convergence control system in a CRT display device;

FIG 13 is a block diagram of an address generator of FIG 12;

FIG 14 is a block diagram of a correction and interpolation circuit of FIG 12;

FIG 15 is a schematic diagram useful for explaining both the reference screen pattern and each definition of terms of the digital dynamic convergence control system;

FIG 16 is a waveform diagram showing a horizontal correction operation;

FIG 17 is a diagram showing a vertical interpolation;

FIG 18 is a diagram showing pixels for interpolation in the reference screen pattern;

FIG 19 is a diagram showing intervals for interpolation in the reference screen pattern;

FIG 20 is a schematic diagram of a magnetic field control yoke device;

FIG 21 is a diagram showing coils for generating two pole magnetic fields having a horizontal axis in the magnetic field control yoke device of FIG 20;

FIG 22 is a diagram showing coils for generating two pole magnetic fields having a vertical axis in the magnetic field control yoke device of FIG 20;

FIG 23 is a diagram showing coils for generating four pole magnetic fields having a horizontal axis in the magnetic field control yoke device of FIG 20;

FIG 24 is a diagram showing coils for generating four pole magnetic fields having a vertical axis in the magnetic field control yoke device of FIG 20;

FIG 25 is a diagram showing coils for generating six pole magnetic fields having a horizontal axis in the magnetic field control yoke device of FIG 20;

FIG 26 is a diagram showing coils for generating six pole magnetic fields having a vertical axis in the magnetic field control yoke device of FIG 20;

FIG 27 is a schematic diagram showing a magnetic field control yoke device coupled to the digital convergence control system constructed according to the principles of the present invention;

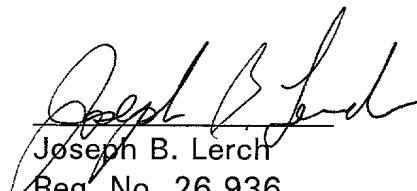
and

FIG 28 is a schematic diagram showing a deflection yoke and CRT of a display device coupled to the digital convergence control system constructed according to the principles of the present invention.

#### REMARKS

This preliminary amendment makes the text of the patent application consistent with the drawings. Entry of this amendment is respectfully solicited.

Respectfully submitted,

  
Joseph B. Lerch  
Reg. No. 26,936  
Attorney for Applicant(s)

DARBY & DARBY P.C.  
805 Third Avenue, 27th Flr.  
New York, NY 10022  
212-527-7700

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PATENT TRADEMARK OFFICE

Docket No. : 2598/OK198

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Seung Won SEO ET AL.

Filed: CONCURRENTLY

For: DIGITAL DYNAMIC CONVERGENCE CONTROL SYSTEM IN A DISPLAY  
SYSTEM

**AMENDMENT MARK-UP SHEET FOR PRELIMINARY AMENDMENT**

Commissioner of Patents and Trademarks  
Washington DC 20231

**BRIEF DESCRIPTION OF THE INVENTION**

A more complete appreciation of this invention, and many of the attendant advantages thereof, will be readily apparent as the same becomes better understood by reference to the following detailed description when considered in conjunction with the accompanying drawings in which like reference symbols indicate the same or similar components, wherein:

FIG 1 is a schematic diagram showing a conventional convergence correction data generator;

FIG 2 is a diagram of the convergence correction data generator of FIG 1;

FIG 3 is a reference screen pattern adapted for use in the convergence correction data generator of FIG 2;

FIGS 4 through 9 are diagrams showing two pole magnetic fields, four pole magnetic fields, and six pole magnetic fields operated in eight coil structure adapted for use in a dynamic convergence correcting apparatus;

FIG 10 is a schematic diagram showing a system adapted for use in a digital dynamic convergence control method;

FIG 11 is a reference screen pattern adapted for use in the digital dynamic convergence control method;

FIG 12 is a block diagram showing a digital dynamic convergence control system in a CRT display device;

FIG 13 is a block diagram of an address generator of FIG 12;

FIG 14 is a block diagram of a correction and interpolation circuit of FIG 12;

FIG 15 is a schematic diagram useful for explaining both the reference screen pattern and each definition of terms of the digital dynamic convergence control system;

FIG[S] 16[A through 16E are] is a waveform[s] diagram showing a horizontal correction operation;

FIG 17 is a diagram showing a vertical interpolation;

FIG 18 is a diagram showing pixels for interpolation in the reference screen pattern;

FIG 19 is a diagram showing intervals for interpolation in the reference screen pattern;

FIG 20 is a schematic diagram of a magnetic field control yoke device;

FIG 21 is a diagram showing coils for generating two pole magnetic fields having a horizontal axis in the magnetic field control yoke device of FIG 20;

FIG 22 is a diagram showing coils for generating two pole magnetic fields having a vertical axis in the magnetic field control yoke device of FIG 20;

FIG 23 is a diagram showing coils for generating four pole magnetic fields having a horizontal axis in the magnetic field control yoke device of FIG 20;

FIG 24 is a diagram showing coils for generating four pole magnetic fields having a vertical axis in the magnetic field control yoke device of FIG 20;

FIG 25 is a diagram showing coils for generating six pole magnetic fields having a horizontal axis in the magnetic field control yoke device of FIG 20;

FIG 26 is a diagram showing coils for generating six pole magnetic fields having a vertical axis in the magnetic field control yoke device of FIG 20;

FIG 27 is a schematic diagram showing a magnetic field control yoke device coupled to the digital convergence control system constructed according to the principles of the present invention; and

FIG 28 is a schematic diagram showing a deflection yoke and CRT of a display device coupled to the digital convergence control system constructed according to the principles of the present invention.